

The image shows a modern multi-story building with a mix of brick and glass facades. The building has a curved roofline and many windows. A large sign on the building reads "SMOKY HOLLOW". The text "Exterior Phenolic Case Study: Smoky Hollow + Little Diversified Architectural Consultants, Durham" is overlaid in white. At the bottom, the Fundermax logo and tagline are visible.

Exterior Phenolic Case Study: Smoky Hollow + Little Diversified Architectural Consultants, Durham

: : Fundermax
More than a panel

Smoky Hollow is a mixed-use urban district¹ in Raleigh, NC, that is blending refined industrial design with progressive workplaces, retail, and amenities in a multiphase revitalization of the area.

In a district that includes office space, apartments, restaurants, and more, Smoky Hollow’s 421 N. Harrington St.² offers a stunning example of Fundermax panels matching high performance with high design.

This exterior phenolic panel case study primarily highlights the entrance to 421 N. Harrington St., which is a 9-story, 225,000 RSF, Class A office atop a ground-level lobby and designed by Little Diversified Architectural Consulting in Durham, North Carolina.

The industrial-influenced design masterfully connects the modern, progressive workplace with the neighborhood’s historical context, and this particular exterior project is a prime example of Fundermax panels being leveraged for their exceptional durability, code compliance, and versatility – all while supporting distinctively high design specifications.

¹ <https://smokyhollowraleigh.com/>
² <https://smokyhollowraleigh.com/directory/421-harrington/>

Situation



Project Architect Caitlin Fedor, AIA, NCARB, with Little Diversified Architectural Consulting in Durham¹, knew the lobby entrance to 421 N. Harrington St. required a material that would meet several essential design specifications.

First, it needed to be durable enough to handle high traffic and exterior weather exposure. When describing the vertical wall application right by the lobby, Fedor recalls, “We knew it was going to be in a heavy traffic area.”

Second, this is a high-rise building, so the material needed to be part of an NFPA 285 compliant system². “That was really critical for us,” says Fedor. “We couldn’t put it on the building if we didn’t have that.”

Next, Fedor knew they wanted to incorporate a wood aesthetic, but due to the aforementioned requirements, actual wood panels were not a viable option. Fedor recalls, “We knew that we wanted a wood type product on the building, but we knew that we also wanted this to be durable – so, not actual wood.”

Finally, they knew they wanted a clean look with a closed joint panel system³ and concealed fasteners. “We wanted something that was NFPA 285 compliant, also had concealed fasteners, and something that wouldn’t have exposed joints to the rainscreen beyond.”

With this combination of needs, the team was hard pressed to find a compliant panel with finish options that would fit their exterior palette and their original design intent.

¹ <https://www.littleonline.com/meet/office/durham>
² <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=285>

³ <https://blog.fundermax.us/why-air-gaps-and-joint-spacing-are-vital>

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N. HARRINGTON ST

421
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Solution

Solution



Fundermax exterior phenolic wall panels¹ were chosen for four main reasons:

CODE COMPLIANCE

Any material that was not NFPA 285 compliant was a nonstarter for this project, so this was the first part of the solution that Fundermax delivered. Of the phenolic panel manufacturers considered for the project, Fundermax was the only one who offered the desired finish in a closed joint, concealed fastener solution that is part of an NFPA 285 compliant system.

Fedor explains, “We knew that we wanted HPL for the wood product. We did consider [another phenolic panel manufacturer] as an alternative, but we could not find a solution for a concealed fastener option that would meet our NFPA 285 requirement.”

¹ <https://fundermax.us/exterior-applications/>



DURABILITY

Since these panels would be installed down to sidewalk level² at the lobby entrance, an extremely high traffic area, they needed to be highly durable and low maintenance. The impact-, scratch-, graffiti-, and weather- resistance of phenolic cladding panels offered all of the necessary strength with minimal maintenance.

VERSATILITY

In order to preserve consistency in the design, the team needed a phenolic wall panel system that could be installed in a vertical wall application and then seamlessly transition to a soffit. Additionally, the panels would be used in the building’s balcony design. The various options for Fundermax panel installation afforded this versatility.

2 <https://blog.fundermax.us/can-hpl-panels-perform-below-10-feet>

AESTHETIC

The desired aesthetic centered on the natural look of wood combined with a very clean installation, without visible fasteners or open joints. Fundermax Max Compact Exterior³ panels in Enigma #0923⁴ provided the natural wood grain look; the NT Matte⁵ finish provided a complementary texture with all of the required durability; and the Fundermax Modulo Plank System (a concealed fastener, closed joint system) offered the clean, seamless look the team had envisioned.

3 <https://fundermax.us/product/exterior-architectural-panels/>
4 <https://fundermax.us/exterior-architectural-panels-colors/?c=0923>
5 <https://fundermax.us/nt-matte/>

“We’re constantly trying to work in a wood aesthetic to our projects... We’re seeing that a lot in this market, and we definitely are looking for cladding material options that are more durable than wood, but then still have the feel and the life of a wood product.”

– Caitlin Fedor, AIA, NCARB

Solution

Results



Architect Caitlin Fedor said the Fundermax phenolic wall panel system worked really well in the project. She appreciated the scale of the texture and size options¹, as she recalls, “The scale of the texture and the options that we had – to kind of play with the different sizes to fit the needs of the building – was very helpful.”

The versatility and high design of the phenolic panels really shined on this project, from a vertical wall to soffits to balcony features. “I think that it looks really great on our balcony. I think [the phenolic panels] really pop, and I think that it has elevated the design.”

Fundermax’s Modulo Plank System offered a quick installation process that made it possible to install the prefabricated panels on a concealed clip system without any open joints, vertically or horizontally.

¹ <https://blog.fundermax.us/benefits-of-different-sized-wall-panels>



Regarding the mounting and fastening system, Fedor says:

“What’s nice about the Modulo system is that it’s a very clean installation. You get that kind of seamless look with no fasteners...

You really kind of only see the fasteners of the very top, and we have the option of getting those color-matched. So, a really clean installation.”

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The Fundermax Difference



The most appealing aspect of the Fundermax panels was NFPA 285 compliance. No matter how compelling the durability or aesthetic of a material may be, the project could not move forward without the code tested data and assembly. The Fundermax sales rep provided all of the code compliance and assembly documentation that was needed.

The Fundermax rep was very accessible to Fedor and helped her team through the process of choosing the right product, even providing a sample mockup so they could see how the Modulo system would actually tie together in the field.

An added benefit was that Fundermax has a local office in Charlotte, NC, which is just over two hours away from the project. “This was a LEED-certified project, so having [Fundermax] in our radius was a benefit.”

Overall, the Fundermax exterior phenolic wall panels offered the same appearance and texture as wood, but with far more durability, and the installation resulted in a clean and seamless look that elevated the design.

Pairing our Max Compact Exterior panels with the Modulo plank installation system offers endless design opportunities for architects looking for durable, low maintenance, code-compliant, and sustainable solutions.

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